IN THE CLAIMS

The following set of claims replaces all prior versions, and listings, of claims in the application:

1-9 (cancelled).

10. (New) A method for identifying and evaluating hazards associated with a system comprising:

a) identifying at least one sub-system of the system to be each evaluated for hazards;

b) for each sub-system, identify inherent hazards which if not controlled could lead to or contribute to an unsafe condition of the system;

c) for each of the inherent hazards, identify one or more single point failures that could result in an occurrence of the inherent hazard or contribute to one of the unsafe conditions;

d) for each of the inherent hazards, identifying features of the system that are associated with the inherent hazard or to the at least one unsafe conditions;

e) for each of the at least one unsafe conditions, analyzing a potential severity of the unsafe condition and assigning a severity level to the unsafe condition;

f) repeating steps (b) to (e) for each sub-group of the system;

g) review the cumulative analyses of the sub-groups to determine if the severity level assigned to any of the unsafe conditions is greater than a predetermined threshold severity level;

h) performing an accident scenario review for each of the unsafe conditions having a severity level greater than the predetermined threshold severity level;

i) for each of the unsafe conditions having a severity level greater than the predetermined threshold severity level, identifying and assigning as a group the single point failures occurring in one or more of the sub-systems that lead to or contribute to the unsafe condition;

j) determining a likelihood of occurrence that of each of failures in the group will occur in a sequence resulting in the unsafe condition;

k) determining a cumulative likelihood that the unsafe condition will occur based on the likelihoods that each of said failures will occur in the sequence that result in the unsafe condition;

l) if the cumulative likelihood that the unsafe condition will occur is above a predetermined risk threshold level, identify at least one mitigating action to be performed to reduce the likelihood of occurrence or the severity of the unsafe condition;

m) for each unsafe condition having a cumulative likelihood of occurrence about the risk threshold level, perform the at least one mitigating action to reduce the likelihood of occurrence of the unsafe condition or to reduce the severity of the unsafe condition;

n) for each unsafe condition having a cumulative likelihood of occurrence about the risk threshold level, document the unsafe condition and the at least one mitigating action, and

o) include the documentation of the unsafe condition and the at least one mitigating action in a database of hazards for use in a subsequent method to identify and evaluate hazards in a subsequent system.

11. (New) A method as in claim 10 wherein the system is a device.

12. (New) A method as in claim 10 wherein the system is a device having a plurality of sub-systems.

13. (New) A method as in claim 10 wherein the subsequent method includes steps (a) to (p), wherein the accident scenario review includes reviewing the database of hazards for unsafe conditions in the subsequent system.

14. (New) A method as in claim 10 wherein step (n) includes documenting records for failures to include the at least one mitigating action for the unsafe condition.